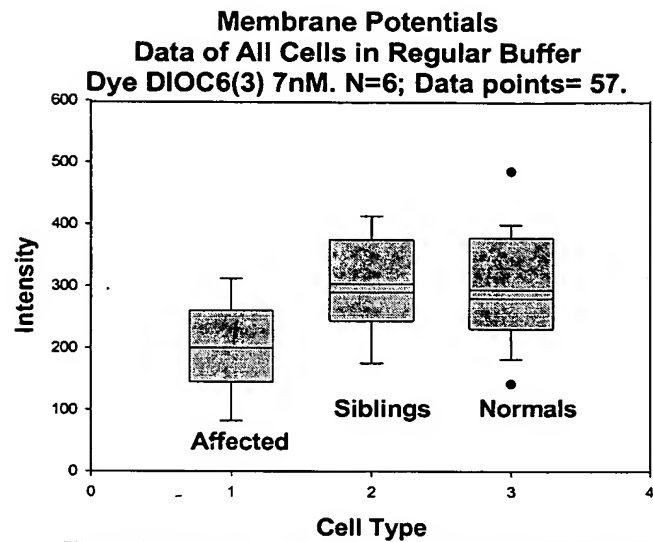


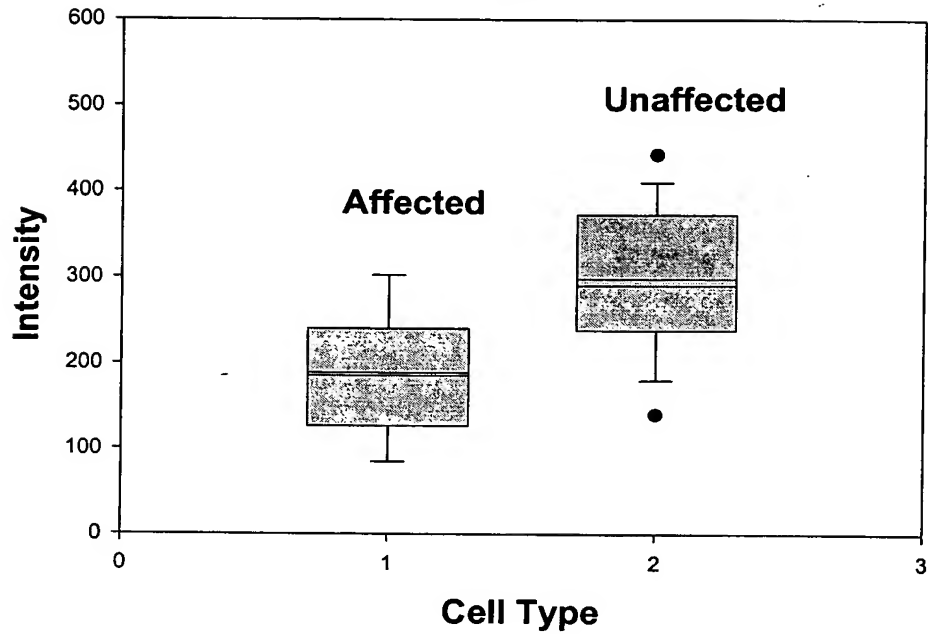
FIGURE 1



The differences in the mean values among the groups are greater than would be expected by chance; there is a statistically significant difference ($P = <0.001$).
Power of performed test with $\alpha = 0.050$: 0.991

FIGURE 2

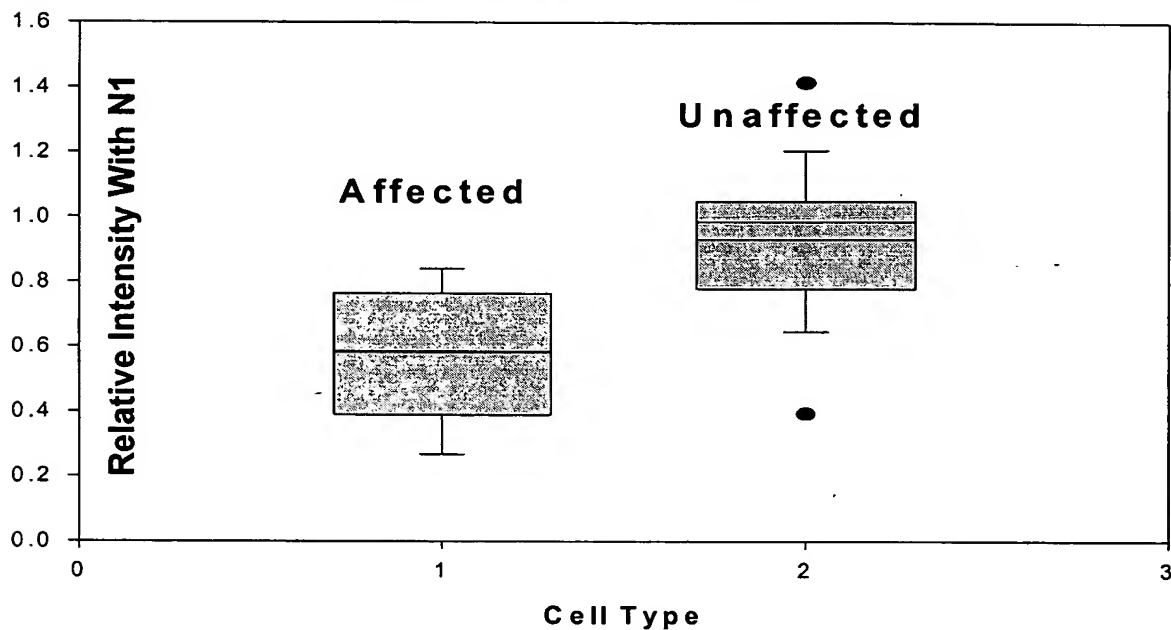
**Membrane Potentials
Summary Data of All Cells**



95 percent confidence interval for difference of means: -159.577 to -66.090
The difference in the mean values of the two groups is greater than
would be expected by chance; there is a statistically significant difference
between the input groups ($P = <0.001$).
Power of performed test with $\alpha = 0.050$: 0.999

FIGURE 3

Summary of all data
All intensities are relative to Cell N1
RATIO-METRIC METHOD



$t = -5.386$ with 54 degrees of freedom. ($P = <0.001$)
95 percent confidence interval for difference of means: -0.478 to -0.219
The difference in the mean values of the two groups is greater than would be expected by chance; there is a statistically significant difference between the input groups ($P = <0.001$).
Power of performed test with $\alpha = 0.050$: 1.000

FIGURE 4

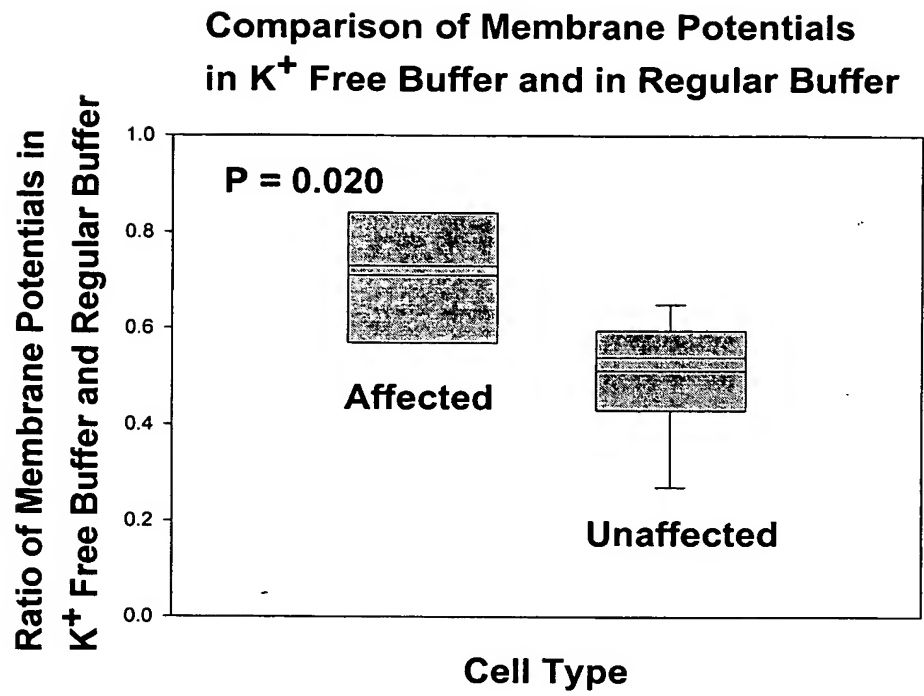
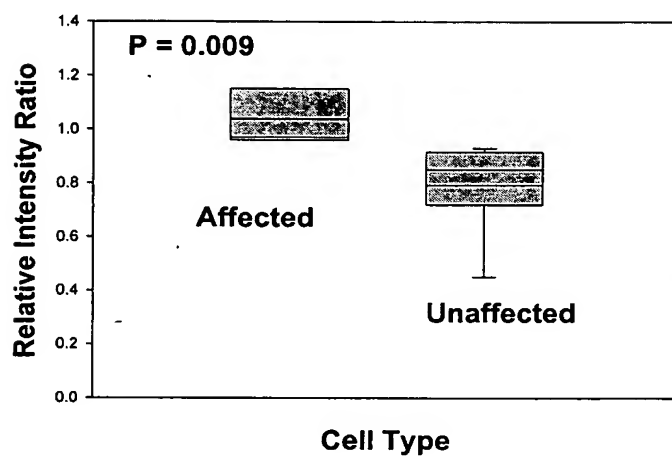


FIGURE 5

Ethacrynate Induced Changes in Membrane Potential

Cells were incubated for 30 min in presence or absence of ethacrynate in regular buffer or in K⁺ free buffer.



**Relative Intensity Ratio = Intensity Ratio in K⁺ Free Buffer /
Intensity Ratio in Regular Buffer**

FIGURE 6

Effect of Ethacrynate on Membrane Potential
Cells were incubated in K^+ Free Buffer with or without ethacrynate (30 μM).

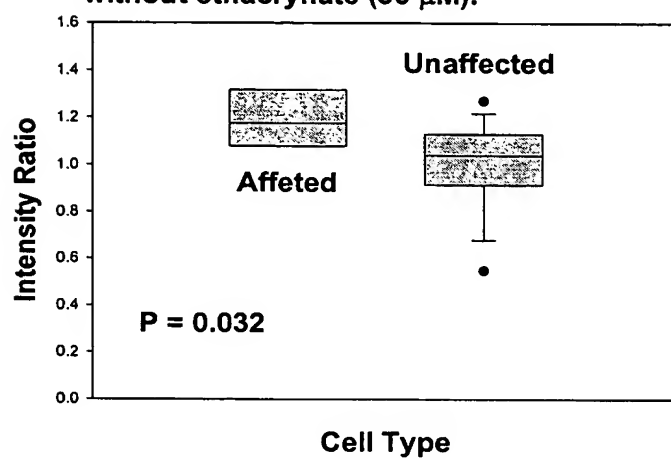
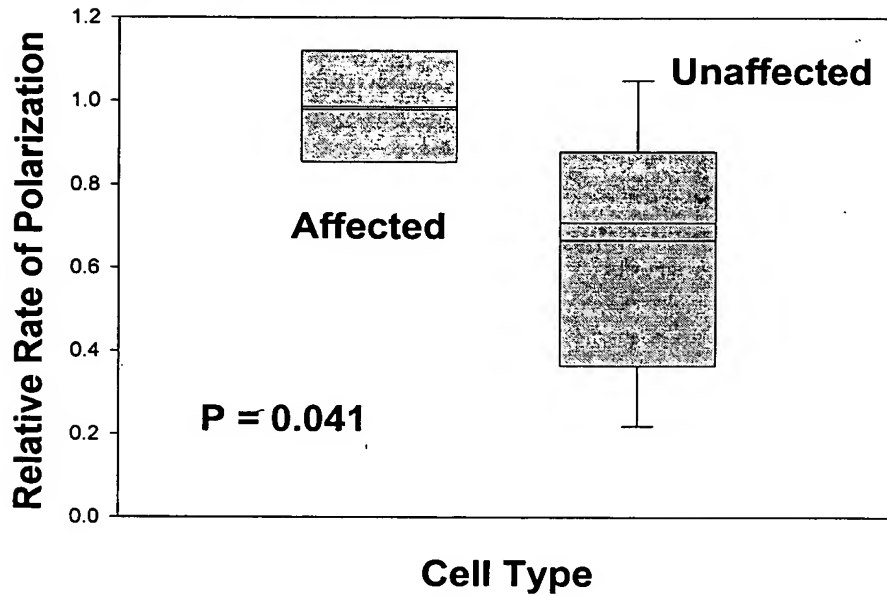


FIGURE 7

Relative Rate of Polarization
Cells were incubated for 30 min with
and without ethacrynate in regular buffer
or in K⁺ free buffer.



**Relative Rate of polarization = Polarization Ratio in K⁺ Free Buffer /
Polarization Ratio in Regular Buffer**

FIGURE 8

Effect of Monensin on Membrane Potential
Cells were incubated for 30 min in K⁺ Free Buffer with or without monensin (10 μ M).

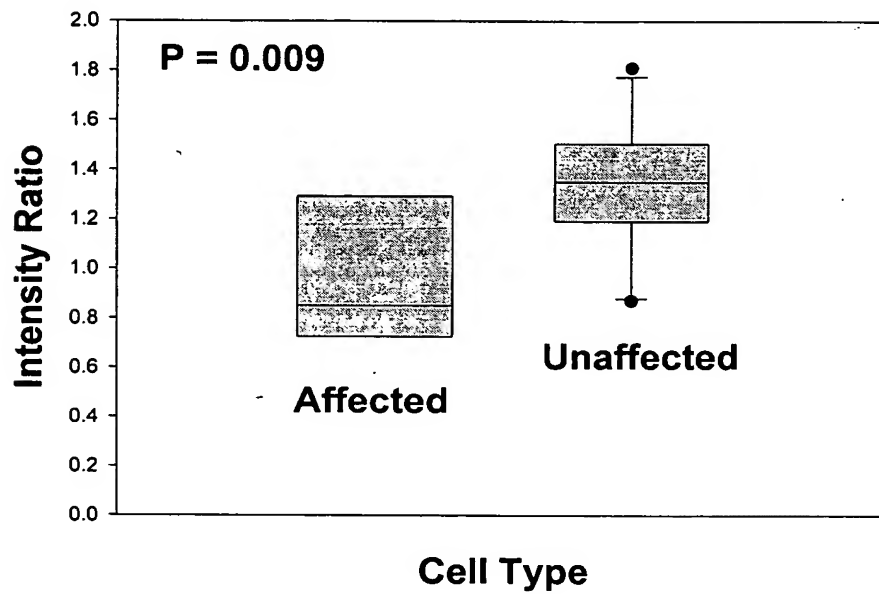


FIGURE 9

Effect of PMA on the rate of repolarization
Cells were incubated for 30 min in K⁺ Free Buffer with or without PMA (2 μ M).

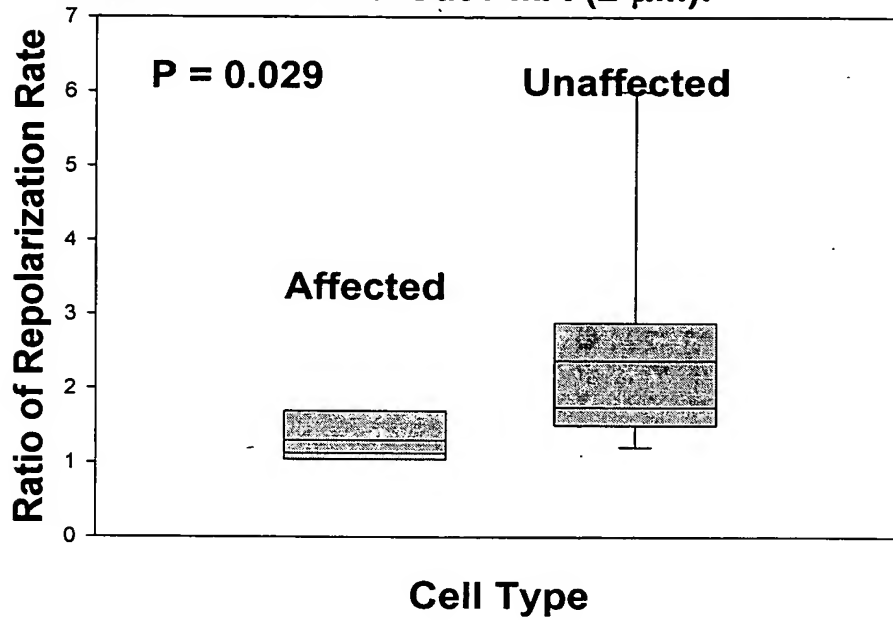


FIGURE 10

Effect of PMA on the Relative Rate of Repolarization
Cells were incubated in regular or K^+ free buffers with or without PMA (2 μ M) for 30 min.

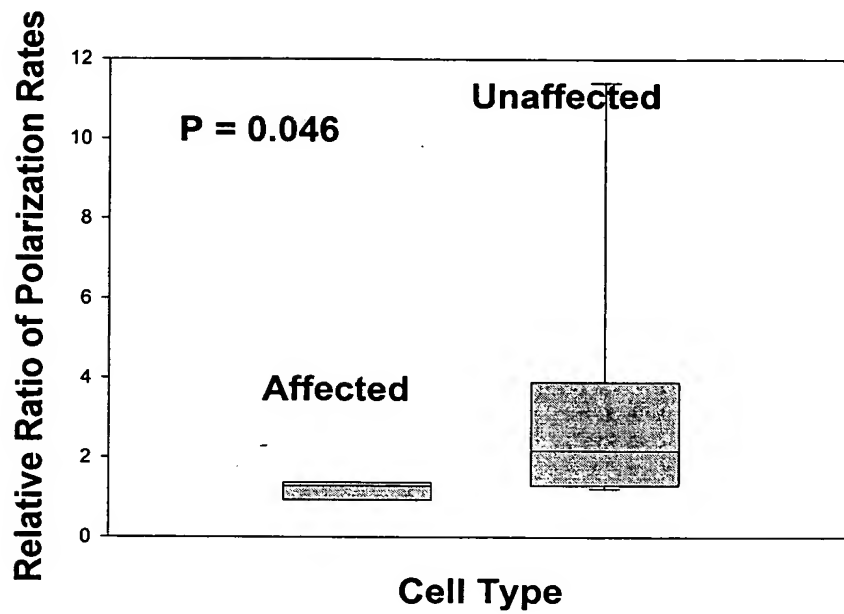


FIGURE 11

Effect of Lithium on Membrane Potential
Cells were incubated in Regular or in K⁺Free Buffer for 2 hours with or without LiCl (20 mM).

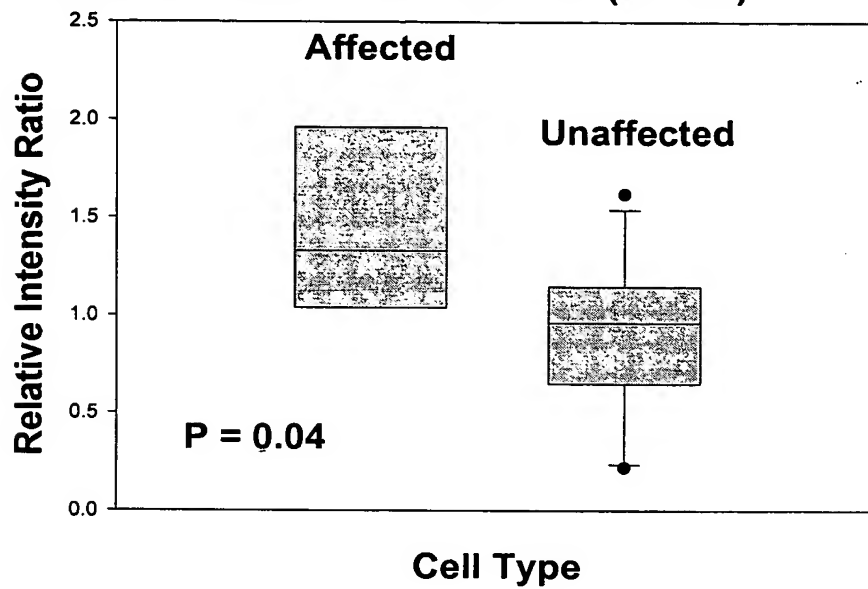


FIGURE 12

CLINICAL TRIALS (OPEN SAMPLES)
P<0.001
WHOLE BLOOD

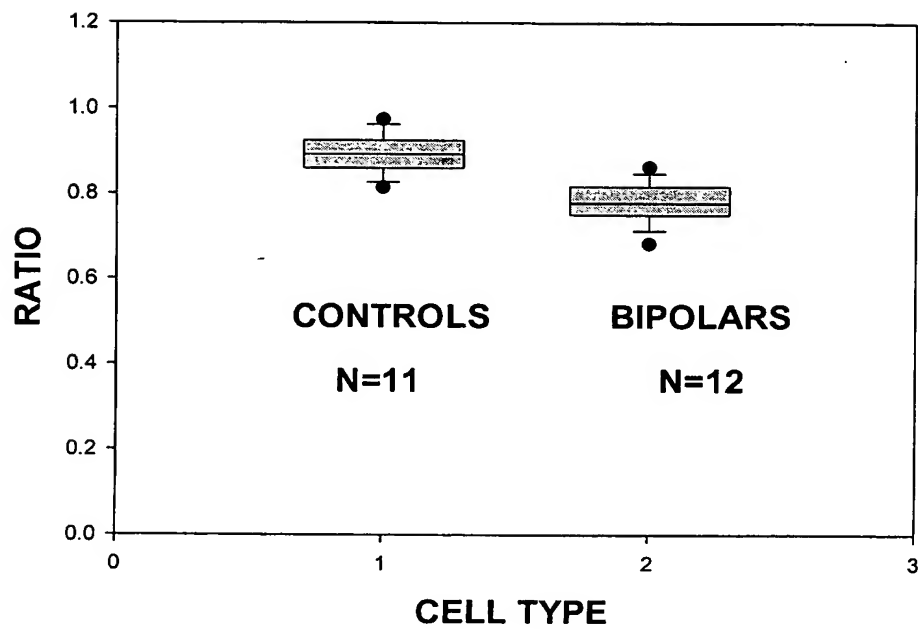


FIGURE 13

**COMPARISON OF ETHACRYNATE
AND SORBITOL IN K+FREE BUFFER**

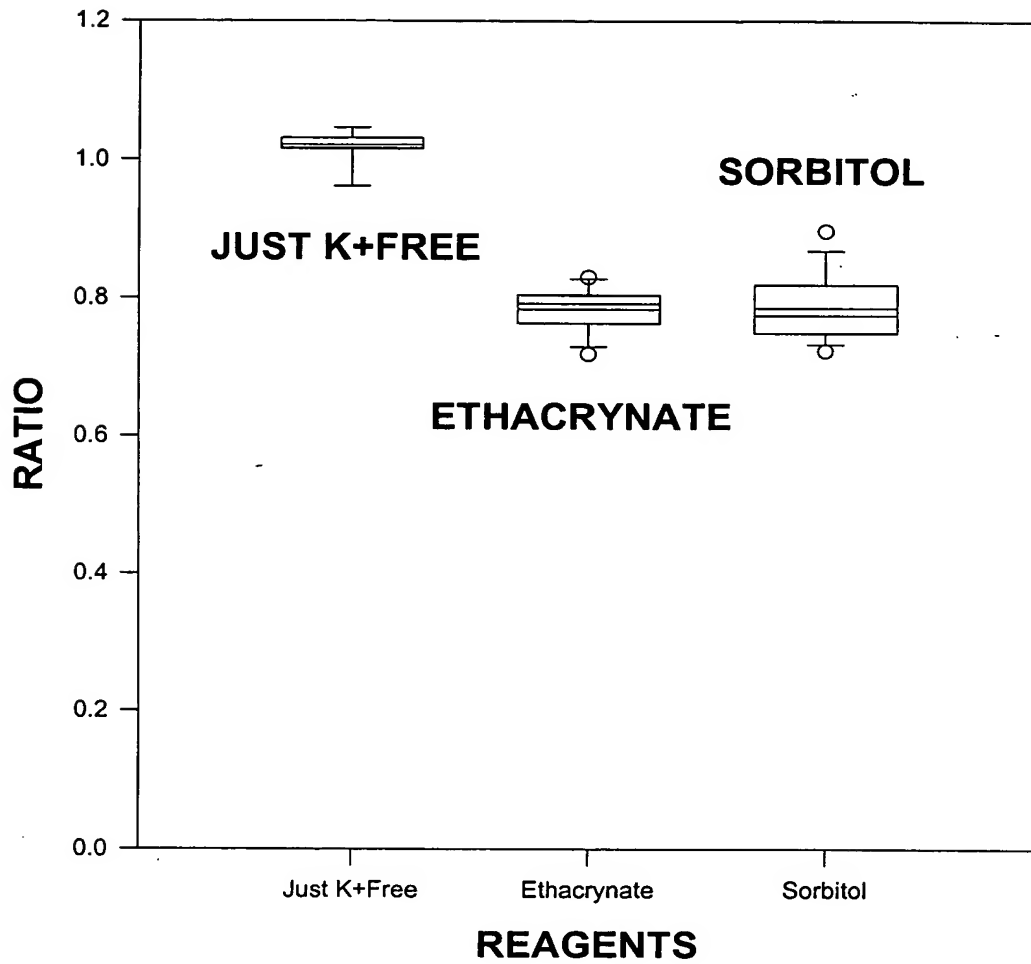


FIGURE 14

**CLINICAL TRIALS
BLIND WHOLE BLOOD SAMPLES
 $P < 0.001$**

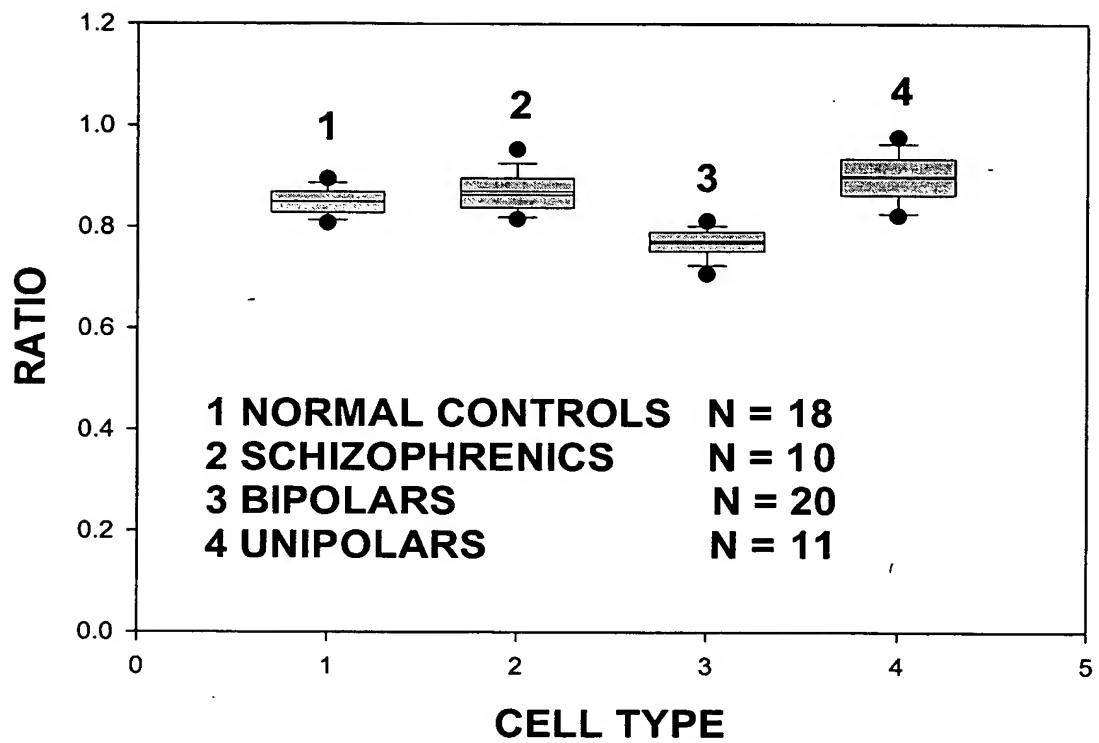


FIGURE 15

**EXAMPLE OF ANOVA TO DIAGNOSE
A BIPOLAR PATIENT
PATIENT-A IS BIPOLAR**

